

REMARKS

Drawings

The Examiner objects to Figures 1 & 8, suggesting that they show only the prior art. However, Applicant submits that both Figures show a base station 14 that is not in the prior art. In particular, the base station 14 of Figures 1 & 8, as an illustrative non-limiting example, is programmed to implement various embodiments of the present invention. As such, the base station 14 is not prior art. Accordingly, neither Figure 1 nor Figure 8 are wholly limited to prior art, and these figures should therefore not be labeled as prior art. In view of this, Applicant respectfully requests the Examiner to withdraw the objection to the drawings.

Specification

The Examiner objects to the specification, suggesting that the description of Figures 1 & 8 should indicate that they show prior art. For the reasons outlined above with respect to the objection to the drawings, Applicant respectfully submits that such a description would be incorrect. Accordingly, Applicant requests withdrawal of the objection to the specification.

Claim Amendments to Independent claims 1, 21, 35, 52, 58, and 64

Independent claim 1 as originally submitted included both a "basic channel report" and "an enhanced channel report." Such claim language was intended by Applicant to indicate that the basic channel report was different than the enhanced channel report, with enhanced channel report providing greater information, as would be understood by one of skill in the art upon reading the specification. Independent claim 1 has now been amended to explicitly require, *inter alia*, that the basic channel report and the enhanced channel report be related such that "wherein said enhanced channel report provides a more detailed view of said downlink channel than said basic channel report." This amendment is believed fully supported

by the original disclosure, *see, e.g.*, ¶0026. This amendment merely makes explicit that which was implicit in the originally submitted claims, and neither narrows the claims nor is it submitted to overcome cited art. Similar amendments have been made in independent claims 21, 35, 52, 58, and 64.

Claim Rejections under §102

Claims 1, 3-4, 7-10, 13-14

The Examiner rejects claims 1, 3-4, 7-10, 13-14 under §102 over EP 1304900A2 ("EP"). Applicant respectfully requests reconsideration.

Originally submitted independent claim 1 required, *inter alia*, both a "basic channel report" and "an enhanced channel report." As amended, independent claim 1 explicitly requires that the "enhanced channel report provide[] a more detailed view of said downlink channel than said basic channel report." When rejecting claim 1 the Examiner points solely to EP ¶ 61 in an attempt to show the claimed enhanced channel report,. However, a close review of this paragraph in EP finds no mention of any enhanced channel report. Instead, ¶61 at most indicates that "when the reception quality is in excess of the threshold value, the quality information is reported." Thus, the cited passage of EP appears to at most teach either transmitting a channel report, or not transmitting a channel report, based on whether the reception quality exceeds a threshold. In other words, an on/off, binary type, transmit/no transmit decision based on comparing quality against a threshold. Importantly, however, ¶61 (and the entire disclosure of EP) appears to contemplate that only one type of channel feedback report is ever transmitted, not two distinctly different types of report with differing levels of detail. Thus, EP at most teaches a simple yes/no decision on transmitting a single predetermined type of channel quality report based on a threshold comparison. EP simply does not teach transmitting a selected one of two types (basic or enhanced) of channel feedback reports based

on any comparison with a threshold. Assuming *arguendo* that EP's sole type of channel report is the claimed "basic channel report," that same type of report simply cannot also qualify as the claimed "enhanced channel report," as the latter term is used in Applicant's application. Thus, even assuming *arguendo* that EP teaches a basic channel report, there is no teaching in EP of an "enhanced channel report" of any kind. Absent such a teaching, EP simply cannot anticipate the subject matter of independent claim 1 under §102. Accordingly, Applicant respectfully submits that the §102 rejection of claims 1, 3-4, 7-10, 13-14 is improper.

With additional regard to dependent claim 10, this claim requires "wherein said basic channel report comprises information related to a first set of one or more channel parameters of said downlink channel, and wherein said enhanced channel report comprises further information on said first set of channel parameters." In rejecting this claim, the Examiner points solely to ¶¶2-6, ¶61 of EP. Applicant respectfully submits that the cited passages of EP simply do not support the Examiner's assertion on this point. A reading of the cited paragraphs in EP finds no mention of any "basic" report regarding one set of channel parameters, and an "enhanced" report with "further information" on that set of channel parameters. Instead, the cited paragraphs appear to only mention a single type of "quality," which is defined in ¶4. As such, Applicant requests that the Examiner set forth a detailed explanation of the set of channel parameters allegedly provided in EP's alleged "basic channel report," and to specifically identify what "further information" is provided by EP depending on a threshold comparison, with specific quotations of the passages relied on in EP for support. In other words, Applicant respectfully requests that the Examiner explain *in detail* what is in EP's alleged "basic channel report," and what is in EP's alleged "enhanced channel report," with specific citations and an explanation of the supporting rationale. Absent such a showing, EP cannot anticipate dependent claim 10 under §102, regardless of how the Examiner views independent claim 1.

Claims 21, 23-25, 28

The Examiner rejects claims 21, 23-25, 28 under §102 over EP. Applicant respectfully requests reconsideration for reasons similar to those discussed above with respect to claim 1. And, Applicant submits that the logic presented above with respect to dependent claim 10 also applies to dependent claim 25.

Claims 35-37

The Examiner rejects claims 35-37 under §102 over EP. Applicant respectfully requests reconsideration for reasons similar to those discussed above with respect to claim 1. And, Applicant submits that the logic presented above with respect to dependent claim 10 also applies to dependent claim 37.

Claims 52-53, 55-56

The Examiner rejects claims 52-53, 55-56 under §102 over EP. Applicant respectfully requests reconsideration for reasons similar to those discussed above with respect to claim 1.

Claims 58-59, 61-62

The Examiner rejects claims 58-59, 61-62 under §102 over EP. Applicant respectfully requests reconsideration for reasons similar to those discussed above with respect to claim 1.

Claims 64, 66

The Examiner rejects claims 64,66 under §102 over EP. Applicant respectfully requests reconsideration for reasons similar to those discussed above with respect to claim 1.

Claim Rejections under §103

Claims 2, 5-6, 11-12

The Examiner rejects claims 2, 5-6, 11-12 under §103 over EP in combination with WO 00/70897 ("WO"). Applicant respectfully requests reconsideration.

First, Applicant notes that, in making the rejection of claim 2, the Examiner relies on EP for all limitations except the "superset" limitation, for which the Examiner relies on WO. Thus, in order for the rejection to stand, EP must show both a basic channel report and an enhanced channel report as claimed in claim 1. However, as pointed out above, EP makes no such showing. Assuming *arguendo* that EP shows a basic channel report, EP make no showing or suggestion of an enhanced channel report as claimed. And, without the teaching of an enhanced channel report, the teachings of WO are simply irrelevant, as the resulting combination simply cannot teach all the claimed limitations. In short, EP does not make the showing required to support the rejections, and WO does not cure this defect (nor does the Examiner assert that it does). Accordingly, Applicant submits that the §103 rejection is improper.

Second, Applicant notes that while WO teaches event-based reporting of mobile station measurements, the relevant triggering event appears to be established on a mobile-station-by-mobile-station basis. Thus, modifying EP according to WO would necessarily require that the relevant threshold values be transmitted to each mobile station individually. Such does not meet the claimed limitation of "one common feedback criterion broadcast to a plurality of mobile terminals," given the understanding of the term "broadcast" to one of ordinary skill in the art. Thus, even if EP is combined with WO, the resulting combination does not teach the claimed invention. Accordingly, Applicant submits that the rejection is improper.

The two points discussed above are present in all of the dependent claims 2, 5-6, 11-12. Therefore, Applicant submits that the Examiner has failed to put forth a *prima facie* case of

obviousness for claims 2, 5-6, 11-12. Accordingly, Applicant submits that these claims define patentable subject matter over the cited art.

With further regard to dependent claims 11-12, Applicant submits that the Examiner's rationale in support of the §103 rejection is fundamentally flawed. The Examiner asserts that WO page 6, liens 5-12 allegedly shows that an enhanced channel report includes information related to a different set of channel parameters than the basic channel report. However, nothing in the cited passage makes any disclosure with respect to an enhanced channel report whatsoever. Instead, the cited passage merely indicates that the "control node" may instruct that specific parameters be measured and reported "when such an event occurs." Thus, the WO control node may at most specify which parameters are reported for an event- triggered "basic channel report," but there is simply no suggestion in WO or EP to report on different channel parameters for an enhanced channel report. In short, both WO and EP have at most reports with system-specified content that are transmitted or not transmitted in binary on/off fashion, but not a basic version report and an enhanced version report as claimed in claims 11-12. Accordingly, Applicant submits that claims 11-12 define patentable subject matter over the cited art, even if independent claim 1 does not.

Claims 22, 26-27

The Examiner rejects claims 22, 26-27 under §103 over EP combined with WO. Applicant respectfully requests reconsideration for reasons similar to those discussed above with respect to dependent claims 2, 5-6, 11-12. And, Applicant submits that the logic presented above with respect to dependent claims 11-12 also applies to dependent claims 26-27.

Claims 38-39

The Examiner rejects claims 38-39 under §103 over EP combined with WO. Applicant respectfully requests reconsideration for reasons similar to those discussed above with respect to dependent claims 2, 5-6, 11-12. And, Applicant submits that the logic presented above with respect to dependent claims 11-12 also applies to dependent claims 38-39.

Claim 54

The Examiner rejects claim 54 under §103 over EP combined with WO. Applicant respectfully requests reconsideration for reasons similar to those discussed above with respect to dependent claims 2, 5-6, 11-12.

Claim 60

The Examiner rejects claim 60 under §103 over EP combined with WO. Applicant respectfully requests reconsideration for reasons similar to those discussed above with respect to dependent claims 2, 5-6, 11-12.

Claim 65

The Examiner rejects claim 65 under §103 over EP combined with WO. Applicant respectfully requests reconsideration for reasons similar to those discussed above with respect to dependent claims 2, 5-6, 11-12.

Claims 15-20

The Examiner rejects claims 15-20 under §103 over EP in combination with U.S. Patent Application Publication 2005/0159110 ("Gaal"). Applicant respectfully requests reconsideration.

Gaal appears to teach that C/I measurements may be reported from a mobile station to a base station using two different "subchannels" -- the re-synch subchannel and the differential feedback subchannel. The re-synch subchannel is used to report the multi-bit full value of the most recent C/I measurement (¶37, ¶45). In contrast, the differential feedback subchannel is used to report a differential amount with respect to the last fully reported C/I value, and this is a one bit value (¶45). The stated purpose for using a one bit value in/on the differential feedback subchannel is to conserve power by transmitting fewer bits (see ¶38).

The Examiner asserts that the rationale for modifying EP in view of Gaal is because "this manner of information exchange [i.e., subchannels] allows the base station to quickly reschedule transmission due to sudden changes in the channel environment," for which the Examiner cites solely to Gaal ¶40. Applicant submits that this rationale is in error. Applicant notes that Gaal ¶40 does state in part "the base station to quickly reschedule transmissions due to sudden changes in the channel environment;" however, this statement is with reference to making timely C/I reports in general, and has nothing to do with using multiple sub-channels. EP already makes the necessary timely C/I reports, so the addition of Gaal's teaching does nothing on this point. Thus, one of skill in the art would not read Gaal and take away the suggestion to use multiple subchannels for the reason stated by the Examiner. In short, the proffered rationale does not support the combination. Thus, the Examiner's rationale for modifying EP is in error, and cannot support the rejection.

Applicant also notes that, as in EP, the "reports" carried on Gaal's subchannels concern the exact same channel parameter and provide the same level of detail. Thus, whatever is transmitted on Gaal's two subchannels simply cannot be construed as a basic channel report and a more detailed version called an enhanced channel report. Instead, they are the same parameter in the same level of detail. Further, Gaal indicates that the subchannels are transmitted on a predetermined schedule, not based on any "determining" that is based on

comparison against a threshold. Thus, modifying EP according to Gaal would require that the subchannels be transmitted on a predetermined schedule, which is both contrary to EP's fundamental purpose and the claimed invention. Thus, even assuming *arguendo* that EP is modified according to Gaal, the resulting combination does not teach each and every element of the claimed invention.

With further regard to dependent claim 17, this claim requires *selectively* employing a different pilot pattern. The Examiner, in rejecting this claim, points to Gaal, ¶¶46-47 and ¶¶ 67-68. A review of the cited passages finds no mention of selectively employing any pilot pattern. Instead, Gaal at most teaches using a particular pilot pattern for a given channel. Thus, the pilot pattern is based on the *channel*, not on the enhanced/basic *content* of the channel. Thus, even assuming *arguendo* that EP is modified according to Gaal, the resulting combination does not teach each and every element of the invention of claim 17.

In view of the above, Applicant submits that the Examiner has failed to put forth a *prima facie* case of obviousness for claims 15-20; Applicant therefore respectfully submits that these claims define patentable subject matter over the cited art.

Claims 29-34

The Examiner rejects claims 29-34 under §103 over EP combined with Gaal. Applicant respectfully requests reconsideration for reasons similar to those discussed above with respect to dependent claims 15-20.

Claims 57

The Examiner rejects claim 57 under §103 over EP combined with Gaal. Applicant respectfully requests reconsideration.

As pointed out above with respect to claim 15, the proffered motivation to combine EP and Gaal is improper, the resulting combination would run counter to a fundamental purpose of EP, and the combination does not show both a basic and an enhanced channel report. Further, Applicant notes that the Examiner does not assert that EP shows "determining at least one common feedback criterion based on ... and an amount of data queued at said base station for transmission...." Instead, it appears that the Examiner relies solely on Gaal ¶9 to allegedly make this teaching. However, a review of Gaal ¶9 finds no mention of changing any broadcast common feedback criterion, or anything else, based on an amount of data queued at the base station. Even assuming *arguendo* that Gaal ¶9 implicitly suggest that data may be queued at the base station, there is no mention or suggestion of changing any threshold or the like based on the amount of data queued. Instead, ¶9 at most suggests that the base station may use more power and/or repetitions to transmit to a mobile station, but such actions are based on the channel quality, not the amount of data queued for the mobile stations. Thus, even assuming *arguendo* that EP is properly modified according to Gaal as suggested by the Examiner, the resulting combination does not teach each and every element of the invention of claim 57.

Claim 63

The Examiner rejects claim 63 under §103 over EP combined with Gaal. Applicant respectfully requests reconsideration for reasons similar to those discussed above with respect to dependent claim 57.

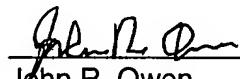
Claim 67

The Examiner rejects claim 67 under §103 over EP combined with Gaal. Applicant respectfully requests reconsideration for reasons similar to those discussed above with respect to dependent claim 57.

In view of the above, Applicant submits that all currently pending claims are in condition for allowance. However, if any additional issues remain, the Examiner is requested to telephone the undersigned so that they may be expeditiously resolved.

Respectfully submitted,
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